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## VI.) WHAT IS CLAIMED OF PROPRIETARY INVENTIVE ORIGIN IS:

★ 1.) An impetus modifying thruster-wheel providing novel variable trajectory dynamics, for an existing power-driven ball pitching-machine; said IM/thruster-wheel comprising:

an existing spindle mounted hub portion supporting a resilient tire body means having at least one IM-formation made upon the tread-surface thereof, whereby said IM-formation means randomly becomes rotationally positioned tangentially impinged instantly against surface of a given conventional ball passing through the pitching-aperture of an existing ball pitching-machine; thereby producing an irregular trajectory ball-pitching event advantageously serving to surprise a practicing ball-batter as to strike-zone arrival.

- 2.) The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel is installed as a randomly cooperative combination right IM/thruster-wheel and left IM/thruster-wheel.
- **3.)** The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel tread-surface includes a diametrically opposed pair of like said impetus-modifying formation means, thereby maintaining dynamic-balance of the spinning assembly.
- **4.)** The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel impetus-modifying formation means are of the negative type made inwardly upon said tread-surface.
- 5.) The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel impetus-modifying formations means are of the positive type made outwardly upon said tread-surface.

- **6.)** The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel impetus-modifying formation means is made entirely across the said tread-surface.
- 7.) The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel impetus-modifying formation means is made laterally to one side of said tread-surface.
- 8.) The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel is formulated from a gum-rubber of approximate 45-60/Shore-durometer rating.
- **9.)** The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel tread-surface also includes a regular tread-pattern, providing added frictional impingement upon existing conventional ball.
- 10.) The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel hub portion is comprised of mirror-image 2-piece construction, whereby both halves include integrally-formed transversely oriented continuous circular-flange portions arranged in transverse opposition as to thereby seat into mating transversely oriented circular-groove formations provided upon opposite sides of thereby gripped tire portion; thus positively retaining said tire member between opposing said hub members.
- 11.) The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel hub portion is comprised of mirror-image 2-piece construction, whereby both halves include integrally-formed transversely oriented regularly spaced circular-flange segment portions arranged in transverse opposition as to thereby index and merge through segmented-apertures formed into thus captive said tire portion; thereby negating excessive radial-growth regardless as to centrifugal-force otherwise acting to throw-off said tire member during high-speed rotation.

- 12.) The thruster-wheel device according to Claim-1, wherein said IM/thruster-wheel hub portion is integrally molded with an elastomeric tire portion via a conventional so called two-stage injection-molding process, whereby the molten-resin of said hub becomes permanently fused with the molten-resin of said tire body; thereby eliminating high-rpm centrifugal-force separation of said tire body.
- ★ 13.) An improved power-driven friction impelling thruster-wheel combination adapted to provide variable trajectory dynamics for a conventional ball/pitching-machine; said thruster-wheel combination comprising:

a set of two or more opposed thruster-wheels each with a resilient tread-surface portion and rotating on discrete drive-spindles aligned on a common radial-plane, at least one of said tread-surfaces including an impetus-modifying formation means upon its perimeter; whereby dependent upon the random positioning occurrence relationship of the driven said thruster-wheel tread-surfaces in which a said impetus-modifying formation can become laterally impinged momentarily against the surface of a given ball passing through the existing thruster-aperture of a conventional ball/pitching-machine, thereby providing an unpredictable ball-pitching trajectory event causing ball to arrive toward a ball-batter person at a desirably surprising region of their strike-zone.

- **14.)** The thruster-wheel device according to Claim-13, wherein said thruster-wheels both include at least one diametrically opposed pair of said impetus-modifying formation means, thereby maintaining dynamic-balance of the spinning assembly.
- **15.)** The thruster-wheel device according to Claim-13, wherein said thruster-wheels include at least one impetus-modifying formation means of the negative type made inward upon said tread-surface.

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- **16.)** The thruster-wheel device according to Claim-13, wherein said thruster-wheels include at least one impetus-modifying formation means of the positive type made outward upon said tread-surface.
- 17.) The thruster-wheel device according to Claim-13, wherein both said thruster-wheel hubs are of a mirror-image 2-piece construction, whereby integrally-formed transversely oriented circular-flange portions are arranged in transverse opposition as to thereby merge and seat into mating transversely oriented circular-groove formations provided upon opposite sides of respective said tires; thereby providing positive engagement as to thereby negate excessive radial-growth and throwing-loss of respective said tire portions during high-speed rotation.
- ★ 18.) An automated method by which to obtain a statistically predictable albeit random ball-pitching action, providing variable trajectory dynamics for a conventional ball/pitching-machine used by practicing ball-batters; said automated method comprising:

providing a pair of discretely opposed abaxially cooperating thruster-wheels rotating in opposite directions to each other on a common radial-plane, said thruster-wheels including a resilient tire portion and a rigid hub portion supported upon a descrete drive-spindle, at least one of said tires including a tread-surface adapted with at least one impetus-modifying formation means on its perimeter;

providing an unpredictable ball-pitching trajectory action via simultaneous bilateral impingement of said thruster-wheels tread-surfaces upon a given ball, whereby dependent upon random positioning occurrence relationship of driven said thruster-wheel upon which a said impetus-modifying formation becomes laterally impinged momentarily against surface of the ball passing through an existing thruster-aperture of a conventional ball/pitching-machine, said impetus-modifying formation means thereby exercising an irregular ball-pitching event causing ball to arrive toward a ball-batter person at a desirably surprising region of their strike-zone.

- 19.) The automated irregular ball-pitching method according to Claim-18, wherein said thruster-wheels optionally both include at least one diametrically opposed pair of said impetus-modifying formation means, thereby maintaining dynamic-balance of the spinning assembly.
- **20.)** The automated irregular ball-pitching method according to Claim-18, wherein said thruster-wheel impetus-modifying means are made as a pair of diametrically opposed inward formations upon said tread-surface, or made as a pair of diametrically opposed outward formations upon said tread-surface.

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